

June 22, 2005

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Lester Snow, Director Department of Water Resources 1416 Ninth Street Sacramento, CA 95814

Dear Director Snow:

Current efforts among State and public water interests are seeking to secure a reliable water supply for California's future. These efforts include conservation, recycling and a realignment of present-day uses. Yet, not being considered is the excess water totaling millions of acrefeet that flows through the Sacramento-San Joaquin Delta each year to the Pacific Ocean.

The California Department of Water Resources identifies this excess water as water above that which is mandated by regulation or law to protect and preserve the environment in the Delta.

Your help is needed to encourage the consideration of this excess water supply by members of Water Resources as our State grapples with securing a water supply to meet California's future needs.

Please join with the California Farm Water Coalition in seeking answers to California's water future by declaring "how can we make it work."

Sincerely.

Michael Wade **Executive Director** 

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CALIFORNIA FARM WATER COALITION

## Meeting California's Water Future

#### Preface

There are several efforts currently underway to seek an adequate water supply for Californian's future. These efforts include renewed commitments to conservation, recycling and a realignment of the current use pattern. However, none of these scenarios provide a future without some segment of California losing through a reduced water supply. The California Farm Water Coalition believes it is time to look toward an increased water supply that may already exist; thus, eliminating the potential of any current water users becoming "losers."

According to the California Department of Water Resources, more water flows through the Sacramento-San Joaquin Delta than is mandated by regulation or law to protect and preserve the environment in the Delta. These excess flows---nearly 34 million acre feet in 1998, a category wet year; nearly 11 million acre feet in 2000, a category above normal year; and 2.5 million acre feet in 2001, a category dry year---represent a source of water that can no longer be ignored.

California's future generations cannot afford today's arguments of why certain efforts relating to increasing a needed water supply from a fraction of Delta outflows "can't work." Instead, we need to be asking "how can we make it work?"

The Delta environment must be protected...yet, a small percentage of the excess Delta outflows could fill a substantial portion of the needed water supply for all of California. Again, we must ask---"how can we make it work?"

Several steps must be taken to increase the available supply of water and the California Farm Water Coalition suggests the following for consideration:

- 1. Establish storage facilities north of the Delta and in the Sierras to capture a portion of this water before it reaches the Sacramento-San Joaquin Delta.
- 2. Construct an alternate Delta conveyance system that would preserve and protect the Sacramento-San Joaquin Delta and its environment while supplying needed water to the southern half of the State.
- 3. Increase storage facilities south of the Sacramento-San Joaquin Delta to preserve the water for future use.

Meeting California's water future demands the recognition that a diversified approach be taken to achieve this goal. An increased, available water supply must be a part of the solution.

### **California Farm Water Coalition**

717 K Street, Suite 417 • Sacramento, CA 95814 (916) 441-7723 www.farmwater.org

# Meeting California's Water Future

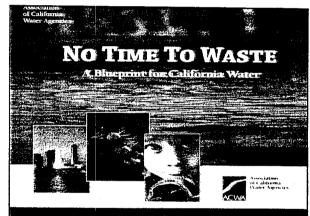
The California Water Plan Update 2005 has undergone a series of public hearings to receive comment on the State's water plan—Bulletin 160-05. This document has been developed over several years and has undergone an extensive schedule of meetings among a variety of stakeholders, including agriculture, urban representatives, environmentalists, academia and regulators.

Bulletin 160 does more than just present the status of California's water picture; it presents several scenarios to work through to reach a solution to California's water future. It describes short-term and long-term actions that can be implemented at the state and regional level to sustain California's communities, economy and environment.

Director Lester Snow of the California Department of Water Resources writes in his introductory message to Bulletin 160 that "Californians can meet their water demands through the year 2030 if we make the right choices and investments."

The Association of California Water Agencies recently released "No Time To Waste...A Blueprint for California Water" as an effort to:

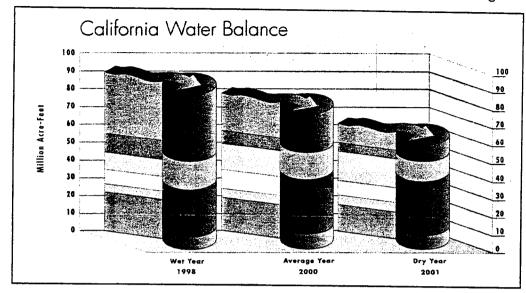
- Bring together the diverse voices within the water community to identify our biggest challenges and agree on actions needed to resolve them.
- 2. Collectively put together a forward-looking action plan for meeting California's future water needs.
- Create a policy-oriented document that would encourage leaders at the state and federal level to re-engage in water issues and also provide a roadmap for investing in our water future.



These two, very important water documents—Bulletin 160 and ACWA's "Blueprint"—serve as parallel pathways leading to California's water future. They each include a very wide-ranging discussion representing special interests and how these interests view water.

Director Snow's comment about "right choices and investments" can only be achieved after a thorough discussion of all possibilities relating to water use in California. ACWA's "Blueprint" provides a frank look at these possibilities and discussions.

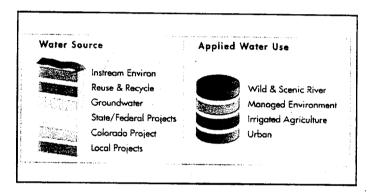
One such discussion in ACWA's "Blueprint" involves the use and availability of California's water supply. According to The California Water Plan Update 2005, the state's water balance can vary significantly from year to year. Three recent years show a marked change in the amount and relative



proportion of the following: water delivered to urban and agricultural sectors and water dedicated to the environment (applied water use); where the water came from (water source); and how much water was reused among the various sectors.

### **FLOOD FLOWS**

Each year, applied water is only a portion of California's total precipitation and inflows. The rest—about 120 million acre-feet in an average year—either evaporates, is used by native vegetation, provides rainfall for agriculture and managed wetlands, or flows out of state or to salt sinks, such as the Pacific Ocean.



The U.S. Bureau of Reclamation released enough water in flood flows during 11 days in mid-May to

satisfy the annual needs of more than 1.3 million Californians. Flood flows totaled 344,156 acrefeet from Shasta and Folsom reservoirs during this time.

Flood flows are created when managers of the water storage systems must release water from the reservoirs to make room for more water flowing into the reservoirs from upstream sources. Typically, the water flowing into the reservoirs results from one of two sources:

- 1. Water runoff from rain-drenched mountains; and
- 2. Water runoff created from the melting of snow in the mountains above the reservoirs.

During the month of May, northern California was soaked with heavier than normal rains that stretched later into the year than normal. According to the National Weather Service, the rain season in California begins July 1 of each year and concludes June 30. The current rain season has seen a longer, drawn-out season for rainfall in many parts of California.

The rain began to fall in earnest in October 2004, with cities in the San Francisco Bay area and south to San Diego receiving 12 times more rainfall than average. At the same time, records for snowfall were being shattered as heavy amounts of snow fell on the mountains.

By April 28, 2005, Los Angeles recorded just shy of 37 inches of rain and all of Southern California exceeded average annual rainfall totals for a normal rainy season. In the Saddleback Mountains of Orange County, the rainfall storm total during a four-day period from Jan. 7-10, 2005, hit 20 inches, or what the Saddleback Mountain range typically records in 12 months.

In the northern part of the State, rainfall was registered at record levels during the month of May, normally characterized as a month with minimal rainfall. This rainfall created heavier than normal flows of runoff into the State's reservoirs, which were already near capacity from earlier runoff volumes. In order to best manage the runoff flowing into the reservoirs, managers increased outflows and, at Folsom and Shasta reservoirs, opened the floodgates to allow releases to flow into the American and Sacramento rivers, respectively.

These flood releases amounted to 183,536 acre-feet (Folsom Reservoir) and 160,620 acre-feet (Shasta Reservoir) in just 11 days. The following graph presents the flood releases recorded during 11 days in May by the U.S. Bureau of Reclamation.

Date	Fo			Shasta reserv	oir :
-		-	aliferação. Sector de Sec	7,584	보다 보고 가지 얼마나 하다 다 되었다.
May 13		8,743		10,431	
May 14		6,898		8,844	
May 15		6,763		8,279	
May 16		6,541		6,414	
May 17		12,890			
_		-		•	
May 19		28,202		•	
•		-	* * *	•	
•		-		•	
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		_0,0_0		.0,201	
TOTAL	•	183,536		160,620	344,156 acre-feet
					- 1
		•			
	May 12 May 13 May 14 May 15 May 16 May 17 May 18 May 19 May 20 May 21 May 21 May 22	May 12 May 13 May 14 May 15 May 16 May 17 May 18 May 19 May 20 May 21 May 22	May 12 2,663 May 13 8,743 May 14 6,898 May 15 6,763 May 16 6,541 May 17 12,890 May 18 19,039 May 19 28,202 May 20 35,944 May 21 30,164 May 22 26,820	May 12 2,663 May 13 8,743 May 14 6,898 May 15 6,763 May 16 6,541 May 17 12,890 May 18 19,039 May 19 28,202 May 20 35,944 May 21 30,164 May 22 26,820	May 12       2,663       7,584         May 13       8,743       10,431         May 14       6,898       8,844         May 15       6,763       8,279         May 16       6,541       6,414         May 17       12,890       48,301         May 18       19,039       26,054         May 19       28,202       17,904         May 20       35,944       9,546         May 21       30,164       7,059         May 22       26,820       10,204

During an average year, California's water use is approximately 76 million acre-feet. The source of this water is:

- In stream Environment
- Reuse & Recycle
- Groundwater
- Sate/Federal Projects
- Colorado Project
- Local Projects

The application of the 76 million acre-feet is divided according to:

- Wild & Scenic River
- Managed Environment
- Irrigated Agriculture
- Urban (homes and businesses)

California's Water Balance increases to an estimated 89 million acre-feet during a wet year and decreases to 61 million acre-feet during a dry year, according to the California Water Plan Update 2005. Flood releases may occur each year, regardless of its wet or dry condition. Flood releases are a result of management operations of the reservoirs as water is released to make room for expectant runoff resulting from melting snow in the mountains. During years of high rainfall, such as recently experienced, the flood releases are increased in volume.

#### **DELTA FLOWS**

Water resulting from flood releases from Folsom and Shasta reservoirs eventually flows to the Sacramento-San Joaquin Delta from the Sacramento River. Water flowing into the Delta has several avenues of exit—1) through the Delta and out the San Francisco Bay to the Pacific Ocean; 2) diverted to Bay-area communities; and 3) through the pumps that send water southward to farms, homes and businesses.

Flood releases through the Delta represent a water flow that is above and beyond those flows that are already designated for use. Designated flows include flows that are mandated by regulation or law to protect and preserve the environment in the Delta. Pumping flows are regulated as to how much water is allowed into the delivery system that stretches southward. Current regulations restrict the pumping action to no more than 6,680 acre-feet. These same regulations reduce the flow of pumped water below this rate during certain times of the year to protect the Delta's fish and wildlife. The 2000 CalFed Record of Decision calls for this flow to increase to 8,500 acre-feet.

Millions of acre-feet of water flow through the Sacramento-San Joaquin Delta each year, regardless of wet-normal-dry year classification. Each year includes a minimum regulatory flow that must be met for protecting the Delta and its environment. Flows that are diverted southward through Delta pumps or to Delta communities are measured according to the year's supply of water. According to the Department of Water Resources, three recent years exhibit the wet, above normal and dry year classifications. The following table reflects the monthly Delta outflows.

Del	to	$\cap$	:441	ow
DE	la	UL	3 L I I	IOW.

	WY 1998 (Wet)		WY 2000 (Above Normal) (Acre-Feet)		WY2001	
					(Dry)	
	( Acre-Feet)				(Acre-Fee	et)
Month	Min. Req.	Actual	Min. Req.	Actual	Min. Req.	Actual
OCT	245,960	296,763	245,960	261,864	245,960	352,002
NOV	267,750	604,174	267,750	404,845	267,750	282,215
DEC	276,705	943,937	276,705	643,606	276,705	368,714
JAN	368,940	4,399,171	276,705	1,324,522	276,705	935,310
FEB	1,563,769	12,820,996	633,124	5,412,251	488,132	1,086,749
MAR	1,760,132	6,421,856	1,689,521	5,400,353	700,959	1,439,102
APR	1,560,992	5,259,903	1,384,463	1,620,499	661,289	7,234,83
MAY	1,477,686	4,157,316	1,018,711	1,356,278	445,091	591,019
JUN	1,066,711	4,268,594	522,248	525,047	422,479	440,611
JUL	491,920	1,997,307	491,920	560,988	-307,450	285,639
AUG	245,960	1,223,188	245,960	370,448	215,215	193,869
SEP	178,500	1,193,705		275,068	178,500	3 245,357 £
Total	9,505,025	43,486,910	7,231,567	18,155,769	4,486,235	6.944.070

Min. Required: is minimum Delta Outflow based on D-1641 Standards. (Information provided by DWR/Operation Scheduling Section)

**Actual**: is total Outflow based on DAYFLOW program calculations. (Inormation provided by DWR/Environmental Services Office)

The above chart reveals that nearly 34 million acre-feet of excess water flowed through the Delta in 1998, a category wet year. In 2000, a category above normal year, almost 11 million acre-feet of excess water flowed through the Delta. Only 2.5 million acre-feet of excess water flowed through the Delta in 2001, a category dry year.

The allocation of only a small portion of the excess flows through the Delta would go a long way in meeting the water needs in California's future. Any discussion as to the available use of these flows must include the aspects of storage and the necessary costs to provide that storage.

The California Farm Water Coalition contends that new supplies of water are available for use by all Californians, as demonstrated by the flood releases by the U.S. Bureau of Reclamation and the tracking of Delta outflows. Making this water available is a possibility through several avenues—

1. Establish storage facilities in Northern California and the Sierras to capture a portion of this water before it reaches the Sacramento-San Joaquin Delta.

Step #6 of ACWA's "Blueprint" calls for a completion of feasibility studies by state and federal agencies regarding increased storage. Part of these studies includes a potential reservoir—Sites Reservoir in the Sacramento Valley. Questions must be answered as to environmental compatibility, construction and operation costs, price of resulting water, etc. Sites Reservoir could provide flexibility to move available water to and/or through the Delta during water-short months.

2. Construct an alternate Delta conveyance system that would preserve and protect the Sacramento-San Joaquin Delta and its environment and enable available water to move southward.

Step #1 of ACWA's "Blueprint" identifies the Sacramento-San Joaquin Delta as the "single most important link in California's water supply system." The "Blueprint" calls for completion of studies within the CalFed Bay-Delta Program that are currently studying:

- a. Expansion of permitted pumping capacity in the Delta to provide flexibility to move pumping from fish-sensitive, drier periods to less sensitive wetter periods.
- b. Action to protect levees, enhance ecosystem health and improve water quality for in-Delta water users as well as others who rely on the Delta for their water supply.

These steps are important but California's water decision-makers must recognize the potential importance of an alternate conveyance system that would move water either around or through the Delta without endangering the health and well-being of the Delta. In past years this system has been identified as the Peripheral Canal and even an enclosed pipe. Regardless of the name or eventual shape, an alternate conveyance system must be thoroughly researched and constructed if proven acceptable to the people of California.

3. Increase storage facilities south of the Sacramento-San Joaquin Delta to preserve the water for future use.

California water managers have successfully demonstrated that water can be stored south of the Delta to enhance the overall flexibility of the State's water management system. Successful efforts have included storage behind the earthen dam at San Luis Reservoir and the groundwater banking undertaken by various interest further south in the San Joaquin Valley. Increasing storage facilities south of the Delta could include:

- a. Adding more water to already existing groundwater banks.
- b. Construction of Los Banos Grandes Reservoir.

These efforts must also undergo a thorough research effort to prove the viability of moving forward according to environmental and financial concerns.

### Seeking California's Water Future

The status quo in relation to water availability and water use will not provide for the future of California. It will take years to accomplish some of the necessary studies required to move forward with positive efforts to secure a reliable water supply for a growing California. Any delays will only serve to further endanger California's water future. Now is the time to adopt the message of "how can we make it work."